October 7, 1958

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Dear Francis,

I'm sorry it took me so long to answer your letter but our baby was born this week and the resulting confusion has muddled things up somewhat. In any case I have enclosed a copy of the procedure we've used to isolate the acceptor RNA from coli. The only thing I should warn you about is that we usually do not carry out the heating in sodium lauryl sulfate on any larger scale than described although all other steps have been scaled up many-fold. If there are any difficulties don't hesitate to write.

Things have been going fairly slowly since we talked but we have succeeded in preparing four of the coli activating enzymes (leucine, valine, isoleucine and methane) free of each other and have been able to work out the detailed kinetics of the activation and transfer step. We have also, I think conclusive evidence that the coli RNA like the rat liver RNA accepts amino acids on the terminal nucleoside end and that there are separate chains for each amino acid. Moreover, we recently have been able to prepare chemically RNA preparations which will accept only a single amino acid but we have not yet achieved a complete physical separation of a homogeneous polynucleotide chain specific for a single amino acid. This is certainly the goal if we are ever to learn anything about what directs a given amino acid to a specific chain.

All of us here would look forward to your visit to our labs. We will probably move in June 1959 so if you are in the midwest before then we certainly would like to have you visit in St. Louis. If you do travel during the summer you can help us christen the new labs.

With best regards,

Sincerely,

Paul Berg.

PB/pb